

AMENDMENT(S) TO THE CLAIMS

1. (currently amended) An optical fiber coupling unit comprising an optical fiber and a sleeve, ~~which the sleeve having~~ a planar surface adjacent to its circumferential surface and an end face, the sleeve being is-arranged on an end portion of the optical fiber and terminates with the end face terminating flush with the associated extreme ~~an end of the optical fiber, so that on the one extreme end there is formed thereby forming a~~ continuous coupling face, ~~with which so that~~ the optical fiber coupling unit can be placed onto an optical waveguide component to establish an optical coupling.
2. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, the optical fiber being ~~closely~~ surrounded by the sleeve, ~~in particular with a distance between~~ the optical fiber and the inner wall of the sleeve being about ~~of~~ 1-5 μm .
3. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the optical fiber is being bonded to into the sleeve using an ~~by means of~~ adhesive.
4. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the continuous coupling face extends at an angle of about 82 degrees with respect to ~~a~~ the longitudinal axis of the optical fiber.
5. (currently amended) The optical fiber coupling unit as ~~claimed in according to~~ claim 1, wherein the sleeve is made of a material which ~~has~~ having a coefficient of thermal expansion corresponding ~~approximately~~ to about that of the optical fiber.

6. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, wherein the sleeve is made of a material selected from the group of a glass and ~~a~~ a ceramic material.

7. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, wherein the sleeve ~~having~~ has an outside diameter ~~of at least~~ between about 2 mm and ~~of at most~~ about 10 mm.

8. (cancelled)

9. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim ~~8~~ 1, the planar surface extending up to the continuous coupling face.

10. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, the optical fiber ~~being provided with having a~~ sheathing, ~~by which the optical fiber is surrounded,~~ and the end portion of the optical fiber accommodated in the sleeve having a portion being freed of the sheathing removed.

11. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 10, the sleeve having extending with a sleeve portion remote from the ~~extreme~~ end of the optical fiber that surrounds a portion of the sheathing ~~over the sheathing and preferably surrounding the sheathing closely, in particular with a distance between the sheathing and the inner wall of the sleeve being about~~ of 1-5 μ m.

12. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 11, the sleeve being transversely

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slit in its sleeve portion remote from the ~~one extreme~~ end of the optical fiber, thereby forming a slit spacer with a portion of the optical fiber having with its sheathing being arranged in the slit space.

13. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 10, the sleeve ~~being provided in two parts~~ comprising of an inner sleeve and an outer sleeve, the inner sleeve being arranged on the ~~exposed~~ portion of the optical fiber, and the outer sleeve extending with a sleeve portion remote from the one extreme end of the optical fiber over a portion of the sheathing.

14. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 13, the inner sleeve being bonded ~~by means of adhesive into~~ to the outer sleeve with an adhesive.

15. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 13, the inner sleeve having about the same outside diameter as the sheathing.

16. (currently amended) The optical fiber coupling unit ~~as claimed in~~ according to claim 1, the sleeve having a length of at least about 2 mm.

17. (currently amended) An optical waveguide arrangement comprising an optical waveguide component, ~~in particular an optical chip,~~ said optical waveguide component having a placement face, from which an optical structure extends, and an optical fiber coupling unit, the optical fiber coupling unit comprising a sleeve with having an optical fiber attached thereto, the optical fiber coupling unit having a circumferential surface adjacent to a planar surface with a coupling face on an end portion, the

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optical fiber coupling unit which is being attached so that
placed with its coupling face is adjacent to against the
placement face of the optical waveguide component, thereby
establishing an optical coupling between the optical fiber and
the optical structure, ~~and is fastened on said placement face.~~

18. (cancelled)

19. (cancelled)

20. (cancelled)